

In The Claims

1. (Currently amended) An Internet based tracking system for tracking the position of a pet location unit carried by a pet which determines location data representing the geographical position of the location unit, wherein the system may be accessed by a remote user from a remote terminal who has subscribed to the system and obtained a personal ID code associated with said location unit, said system comprising:

 a web host connected to the Internet having a computer readable medium;

 a host computer program residing on said web host having a set of computer readable instructions which include:

 input instructions for receiving a tracking request from the remote user via the Internet, said tracking request including said ID code;

 processing instructions for processing and routing said tracking request in response to receiving said request;

 communication instructions initializing wireless communication with the location unit in response to said tracking request;

 location instructions responsive to said processing instructions for generating a position call signal from said web host, outputting said call signal to the location unit, and receiving position data back from said location unit,

 display instructions for outputting said position data for display of the location unit's position by the remote user

via the internet; and

error instructions generating a no-communication signal outputting from said web host to said remote user when communications fail between said web host and the location unit; and

said pet location unit comprising;

- a location chip for receiving geo-position information;
- a processor for processing said geo-position information and generating said position data representing the current location of the unit;
- a transceiver for transmitting said position data to said web host;
- said processor controlling said transceiver to automatically transmit said position data in response to answering said position call signal from said web host;

and

- a power supply for supplying power to said location chip, said processor and said transceiver.

2. (Canceled)

3. (Amended) The system of claim 1 wherein said input instructions are contained in an input module, said communication instructions are contained in a communication module, said location instructions are contained in a location module, and said display instructions are contained in a display module; and including a main processing module for calling said communication, location, and display modules to carry out their respective instructions.

4. (Amended) The system of claim 1 wherein said host computer instruction include validation instructions for comparing said unit ID code to an access code stored on said web host, and said instructions allowing said input instructions to

generate said tracking call when said unit ID code corresponds to an authorized access code.

5. (Original) The system of claim 1 wherein said computer readable instructions include:

formatting instructions for formatting said location data into a display map of the current location of the location unit, and display instructions for outputting said map to the remote user via the Internet.

6. (Original) The system of claim 5 wherein said display map includes a position indicator indicating the current location.

7. (Cancelled)

8. (Cancelled)

9. (Amended) The system of claim 1 wherein said location chip is a GPS chip for receiving geo-position information from a global positioning system.

10 (Amended) The system of claim 1 wherein a computer readable medium is included within said processor and including:

a set of computer instructions embodied in said computer readable medium wherein said instructions perform the steps of detecting said position call signal;

requesting tracking information from said location chip;

generating current position data from said tracking information; and,

providing said position data for transmission to a remote location.

11. (Original) The system of claim 10 wherein said instructions include means embodied in computer readable code for returning said processor to a standby mode after transmission of said location data to said remote location.

12. (Amended) The system of claim 8 wherein said position data is embodied in a digital packet containing digital data only, and having no audio signal component.

13. (Amended) The device of claim 12 wherein said digital packet includes access code data identifying a specific object to which the device is assigned and location data based on said position representing latitude and longitude.

14. (Original) The system of claim 1 where said pet location unit is carried by a collar to be worn about the neck of the pet.

15. (Original) The system of claim 14 including tamper resistant means for securing said unit to the pet collar.

16. (Amended) The system of claim 15 including a protector key automatically transmitting current position data to the web host in response to an unauthorized removal of the pet collar and location unit from the pet.

17. (Original) The system of claim 14 wherein said location unit is integral as one piece with said pet collar.

18-42. (Cancelled).

43. (Currently amended) An Internet based tracking system for tracking the position of a portable location unit carried by one of a pet and other moving object by a system subscriber to whom the location unit is assigned, said location unit operable to determine and transmit position data representing the geographical position of the location unit, wherein the system is accessed over the Internet by the subscriber from a remote terminal, said system comprising:

a web host connected to the Internet having a computer readable medium;

a host computer program residing on said web host having a set of computer readable instructions which include:

input instructions for receiving a tracking request signal from the remote user via the Internet, said tracking request having a unit ID code with said location unit;

processing instructions for receiving said tracking request signal and processing and routing said tracking request signal;

communication instructions initializing wireless communication with the location unit;

location instructions responsive to said processing instructions for generating a position call signal, outputting said call signal from the web host to the location unit, and receiving position data from said location unit, and

display instructions for outputting said position data for display of the location unit's position by the subscriber via the internet; and

said location unit adapted for being carried by the pet having a processor with a computer readable medium, and a set of computer instructions embodied in said computer readable medium executable by said processor for automatically:

detecting said position call signal from said web host at said location unit;

requesting tracking information from said location chip;

generating current position data from said tracking information; and,

transmitting said position data to said web host.

44. (Previously added) The system of claim 43 wherein said computer readable instructions include:

formatting instructions for formatting said location data into a display map of the current location of the location unit, and display instructions for outputting said map to the remote user via the Internet.

45. (Previously added) The system of claim 43 wherein said tracking request signal includes said ID code and said computer readable instructions include validation instructions for comparing said unit ID code to an access code stored on said web host, and said instructions allowing said input instructions to generate said tracking call when said unit ID code corresponds to an authorized access code.

46. (Previously added) The system of claim 43 wherein said instructions include means embodied in computer readable code for returning said processor to a standby mode after transmission of said location data to said remote location.

47. (Previously added) The system of claim 43 wherein said position data is embodied in a low power digital packet containing digital data only, and having no audio signal component.

48. (Previously added) The device of claim 47 wherein said digital packet includes said ID code and position data representing latitude and longitude.

49. (Previously added) The system of claim 43 where said pet location unit is carried by a collar to be worn about the neck of the pet.

50. (Previously added) The system of claim 15 including a protector key automatically transmitting current position data to the web host in response to an unauthorized removal of the pet collar and location unit from the pet along with an alarm notice.

51. (Currently amended) An Internet based computerized system for

determining the location of a portable location unit carried by one of a pet and other moveable object wherein a system subscriber maintains a remote computer terminal, said system comprising:

 a web host connected to a wide area web network, said web host having a computer readable medium;

 a location unit for being carried by one of ~~an individual~~ a pet and other moving object for calculating the location of the unit at any given time and transmitting a low power digital location data packet having location data, wherein the data packet includes protocol data, a personal ID code as an identifier, and GPS data representing latitude and longitude without any audio component capability; and

 a host computer program having instructions embodied in computer readable code residing on said web host for receiving a tracking request from the subscriber, transmitting a tracking call from said web host to said location unit, receiving back said low power digital location data packet from said location unit representing the current position of the unit automatically in response to said tracking call, and transmitting the GPS data regarding the current position of the unit to said web host whereby the location of the unit may be transmitted over the Internet and displayed at the subscriber's terminal.

52. (Previously added) The system of claim 51 wherein said location unit includes a transceiver for transmitting said low powered digital location data packet to said subscriber's terminal; and

 a processor for controlling said transceiver to generate and transmit said location data packet in response to automatically answering said tracking call from said web host; and

a power supply for supplying power to said processor and said transceiver.

53. (Previously added) The system of claim 52 wherein said program includes instructions to return said processor to a standby power mode after said transceiver has transmitted said location data packet to said subscriber's terminal.

54. (Previously added) The system of claim 52 wherein said processor includes a computer readable medium, and a set of computer instructions embodied in said computer readable medium executable by said processor for:

detecting said tracking call signal from said web host at said location unit;

requesting tracking information from said location chip;

generating said lower power digital data packet containing current GPS data from said tracking information; and,

transmitting said digital data packet to said web host.

55. (Previously added) The system of claim 54 including an auxiliary power supply for supplying power to the processor and transceiver when said main power supply is insufficient to transmit said signal.

56. (Previously added) A method of locating a portable location unit carried by one of a pet and other moving object by system subscribers having a computer terminals with a display, said method comprising:

providing a web host connectable to a plurality of the subscriber's computer terminals concurrently;

providing a plurality of location units assigned to respective system subscribers;

receiving a tracking request at said web host initiated at one of the subscriber's terminal seeking the present location of the assigned location unit;

transmitting a tracking call to the location unit whose location is desired in response to receiving said tracking request;

receiving a low power digital location data packet having only digital data including protocol data, a personal ID code identifying said location unit, and GPS data representing latitude and longitude at said web host from the location unit representing the current location of the unit in response to said tracking call; and

providing said location data to the computer terminal of the subscriber over the Internet for display of the current location of the unit on the subscriber's terminal display.

57. (Previously added) The method of claim 56 comprising the steps of:

receiving a subscriber's ID code entered by the subscriber;

providing a database of valid access codes stored on said web host;

comparing said subscriber's ID code to said database of valid access code on said web host; and,

allowing input of said tracking request on said web host only upon discovering a match between said subscriber's ID code and said valid access codes within said database.

58. (Previously added) The method of claim 57 further comprising the steps of:

receiving on the web host a history of position points from said location unit;

formatting said position points on said web host into a tracking path
representing the history of travel of said location unit; and,
outputting said travel path from said web host to the subscriber's terminal
via the Internet.